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*****
***** POSTUTIL Version 1.56      Level 070627
*****
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Run Title:
CLECO, Brame, Rodemacher II
ALM-step1
Repartitioning of NO3/HNO3

Note: provide NMET lines of the form * UTMET = name * *END*

or * MET1D = name * *END*

or * M2DRHU = name * *END*
(and) * M2DTMP = name * *END*
(and) * M2DRHO = name * *END*

and NFILES lines of the form * MODDAT = name * *END*

where the * should be replaced with an exclamation point,
the special delimiter character.

INPUT GROUP: 1 -- General run control parameters

Starting date: Year (ISYR) -- No default !ISYR = 2001 !
Month (ISMO) -- No default !ISMO = 1 !
Day (ISDY) -- No default !ISDY = 1 !
Hour (ISHR) -- No default !ISHR = 0 !

Number of periods to process
(NPER) -- No default !NPER = 8752 !

Number of species to process from CALPUFF runs
(NSPECINP) -- No default !NSPECINP = 9 !

Number of species to write to output file
(NSPECOUT) -- No default !NSPECOUT = 9 !

Number of species to compute from those modeled
(must be no greater than NSPECOUT)
(NSPECCMP) -- No default !NSPECCMP = 0 !

When multiple files are used, a species name may appear in more than one file. Data for this species will be summed (appropriate if the CALPUFF runs use different source groups). If this summing is not appropriate, remove duplicate species from the file(s).

Stop run if duplicate species names
are found? (MDUPLCT) Default: 0 ! MDUPLCT = 1 !
 0 = no (i.e., duplicate species are summed)
 1 = yes (i.e., run is halted)

Data for each species in a CALPUFF data file may also be scaled as they are read. This can be done to alter the emission rate of all sources that were modeled in a particular CALPUFF application. The scaling factor for each species is entered in Subgroup (2d), for each file for which scaling is requested.

Number of CALPUFF data files that will be scaled
(must be no greater than NFILES)
(NSCALED) Default: 0 ! NSCALED = 0 !

Ammonia-Limiting Method Option to recompute the HNO3/NO3 concentration partition prior to performing other actions is controlled by MNITRATE. This option will NOT alter any deposition fluxes contained in the CALPUFF file(s). Three partition selections are provided. The first two are typically used in sequence (POSTUTIL is run more than once). The first selection (MNITRATE=1) computes the partition for the TOTAL (all sources) concentration fields (SO4, NO3, HNO3; NH3), and the second (MNITRATE=2) uses this partition (from the previous application of POSTUTIL) to compute the partition for individual source groups. The third selection (MNITRATE=3) can be used instead in a single POSTUTIL application if a file of background concentrations is provided (BCKGALM in Input Group 0).

Required information for MNITRATE=1 includes:

 species NO3, HNO3, and SO4
 NH3 concentration(s)
 met. data file for RH and T

Required information for MNITRATE=2 includes:

 species NO3 and HNO3 for a source group
 species NO3ALL and HNO3ALL for all source groups, properly
 partitioned

Required information for MNITRATE=3 includes:

 species NO3, HNO3, and SO4 for a source group
 species NO3, HNO3, SO4 and TNH3 from the background BCKGALM file
 If TNH3 is not in the background BCKGALM file, monthly TNH3
 concentrations are used (BCKTNH3)

Recompute the HNO3/NO3 partition for concentrations?
(MNITRATE) Default: 0 ! MNITRATE = 1 !
 0 = no
 1 = yes, for all sources combined
 2 = yes, for a source group
 3 = yes, ALM application in one step

SOURCE OF AMMONIA:

Ammonia may be available as a modeled species in the CALPUFF files, and it may or may not be appropriate to use it for repartitioning NO₃/HNO₃ (in option MNITRATE=1 or MNITRATE=3). Its use is controlled by NH3TYP. When NH₃ is listed as a processed species in Subgroup (2a), as one of the NSPECINP ASPECI entries, and the right option is chosen for NH3TYP, the NH₃ modeled values from the CALPUFF concentration files will be used in the chemical equilibrium calculation.

NH3TYP also controls when monthly background ammonia values are used. Both gaseous (NH₃) and total (TNH₃) ammonia can be provided monthly as BCKNH₃/BCKTNH₃.

What is the input source of Ammonia?

(NH3TYP) No Default ! NH3TYP = 3 !

0 = No background will be used.

ONLY NH₃ from the concentration

files listed in Subgroup (2a) as

a processed species will be used.

(Cannot be used with MNITRATE=3)

1 = NH₃ Monthly averaged background (BCKNH₃)

listed below will be added to NH₃ from

concentration files listed in Subgroup (2a)

2 = NH₃ from background concentration file BCKGALM

will be added to NH₃ from concentration files

listed in Subgroup (2a)

(ONLY possible for MNITRATE=3)

3 = NH₃ Monthly averaged background (BCKNH₃)

listed below will be used alone.

4 = NH₃ from background concentration file BCKGALM

will be used alone

(ONLY possible for MNITRATE=3)

NH3TYP	NH3 CONC	NH3 FROM BCKNH3	NH3 FROM BCKGALM
0	X	0	0
1	X	X	0
2	X	0	X
3	0	X	0
4	0	0	X

Default monthly (12 values) background ammonia concentration (ppb)
used for HNO₃/NO₃ partition:

Gaseous NH3 (BCKNH3) Default: -999
!BCKNH3 = 3., 3., 3., 3., 3., 3., 3., 3., 4*3. !

Total TNH3 (BCKTNH3) Default: -999
* BCKTNH3 = 1., 1., 1., 1.1, 1.4, 1.3, 1.3, 1.2, 4*1. *

If a single value is entered, this is used for all 12 months.
Month 1 is JANUARY, Month 12 is DECEMBER.

!END!

NOTICE: Starting year in control file sets the
expected century for the simulation. All
YY years are converted to YYYY years in
the range: 1951 2050

INPUT GROUP: 2 -- Species Processing Information

Subgroup (2a)

The following NSPECINP species will be processed:

! ASPECI = SO2 ! !END!
! ASPECI = SO4 ! !END!
! ASPECI = NOX ! !END!
! ASPECI = HNO3 ! !END!
! ASPECI = NO3 ! !END!
! ASPECI = PMC ! !END!
! ASPECI = PMF ! !END!
! ASPECI = EC ! !END!
! ASPECI = SOA ! !END!

Subgroup (2b)

The following NSPECOUT species will be written:

! ASPECO = SO2 ! !END!
! ASPECO = SO4 ! !END!
! ASPECO = NOX ! !END!
! ASPECO = HNO3 ! !END!
! ASPECO = NO3 ! !END!
! ASPECO = PMC ! !END!
! ASPECO = PMF ! !END!
! ASPECO = EC ! !END!
! ASPECO = SOA ! !END!

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*****
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***** POSTUTIL Version 1.56      Level 070627  
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POSTUTIL Control File Input Summary -----

Run starting date -- year: 2000
month: 12
day: 31
Julian day: 366
time beginning - hour(0-23): 23
- second: 0
Run length (periods): 8752

Note: the length of a period is controlled by
the averaging time selected in the model

Partition between HNO3 and NO3 is computed

NH3 background (in ppb) listed below will be
used alone for the NO3/HNO3 repartitioning

Default background Ammonia (ppb) - NH3 TNH3

January	=	3.00000000	-999.000000
February	=	3.00000000	-999.000000
March	=	3.00000000	-999.000000
April	=	3.00000000	-999.000000
May	=	3.00000000	-999.000000
June	=	3.00000000	-999.000000
July	=	3.00000000	-999.000000
August	=	3.00000000	-999.000000
September	=	3.00000000	-999.000000
October	=	3.00000000	-999.000000
November	=	3.00000000	-999.000000
December	=	3.00000000	-999.000000

Species needed from input file --

SO2
SO4
NOX
HNO3
NO3
PMC
PMF
EC
SOA

Species written to output file --

SO2
SO4
NOX

HNO3
NO3
PMC
PMF
EC
SOA

Species computed from input species --

PROCESSED MODEL FILE ----- Number 1

CALPUFF 5.8.4 130731

CALPUFF Input File
Cleco, Brame Energy Center, Rodemacher II (WFGD, 0.07 lb/MMBtu)
2001 Baseline, REV E

Averaging time for values reported from model:

1 HOUR

Number of averaging periods in file from model:

8752

Chemical species names for each layer in model:

SO2 1
SO4 1
NOX 1
HNO3 1
NO3 1
PMC 1
PMF 1
EC 1
SOA 1

msyr,mjsday = 2000 366
mshr,mssec = 23 0
nsecdt (period) = 3600
mnper,nszout,mavgpd = 8752 9 1
xorigkm,yorigkm,nstas = -951.547058 -1646.63708 162
ielmet,jelmet = 462 376
delx,dely,nz = 4.00000000 4.00000000 1
iastar,iastop,jastar,jastop = 288 451 117 274
isastr,isastp,jsastr,jsastp = 1 462 1 376
(computed) ngx,ngy = 462 376
meshdn,npts,nareas = 1 1 0
nlines,nvols = 0 0
ndrec,nctrec,LSGRID = 120 0 F

Source names stored (all files):

type: pt1 - UNIT 2

***** HNO3/NO3 Partitioning *****
SO4 is available
NO3 is available
HNO3 is available
NH3 gas is NOT available
total NH3 is NOT available
since no NH3gas and no totalNH3 are present
in any CALPUFF concentration files
NH3 from BCKNH3 or BCKTNH3 will be used

Chemical species names written to new file:

SO2	1
SO4	1
NOX	1
HNO3	1
NO3	1
PMC	1
PMF	1
EC	1
SOA	1

INPUT FILES

Default Name	Unit No.	File Name and Path
POSTUTIL.INP	5	PU_RODE_WFGD_01E.inp
CALPUFF.DAT	10	cp_rode_wfgd_01e.dat
MET.DAT	4	d:\ar and la calmet\refined cenrap\2001\01met01a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met01b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met01c.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met02a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met02b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met02c.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met03a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met03b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met03c.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met04a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met04b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met04c.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met05a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met05b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met05c.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met06a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met06b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met06c.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met07a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met07b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met07c.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met08a.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met08b.met
(none)	4	d:\ar and la calmet\refined cenrap\2001\01met08c.met

(none) 4 d:\ar and la calmet\refined cenrap\2001\01met09a.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met09b.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met09c.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met10a.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met10b.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met10c.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met11a.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met11b.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met11c.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met12a.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met12b.met
(none) 4 d:\ar and la calmet\refined cenrap\2001\01met12c.met

OUTPUT FILES

Default Name Unit No. File Name and Path

POSTUTIL.LST 7 pu_rode_wfgd_01e.lst
MODEL.DAT 8 pu_rode_wfgd_01e.flx

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0
End of met data : 200101023 0

Skipping periods in data files

Start Time 2000 366 23 0
Data File --- Skipped Periods
1 0

Skipping periods in background pollutant files

Start Time 2000 366 23 0
Data File --- Skipped Periods
2 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0
Start of met data : 200101023 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0
End of met data : 200102023 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0
Start of met data : 200102023 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0
End of met data : 200103123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200103123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200104123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200104123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200105123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200105123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200105923 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200105923 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200106923 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200106923 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200107923 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200107923 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200109023 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200109023 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200110023 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200110023 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200111023 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200111023 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200112023 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200112023 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200113023 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200113023 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200114023 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200114023 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200115123 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200115123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200116123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200116123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200117123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200117123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200118123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200118123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200119123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200119123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200120123 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200120123 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200121223 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0

Start of met data : 200121223 0

WARNING subr. METQA -- Met data end early

End of simulation: 200136515 0

End of met data : 200122223 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200122223 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200123223 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200123223 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200124323 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200124323 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200125323 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200125323 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200126323 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200126323 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200127323 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200127323 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200128323 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200128323 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200129323 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200129323 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200130423 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200130423 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200131423 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200131423 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200132423 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200132423 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200133423 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200133423 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200134423 0

WARNING in subr. METQA -- Met data begin late

Start of simulation: 200036623 0
Start of met data : 200134423 0

WARNING subr. METQA -- Met data end early
End of simulation: 200136515 0
End of met data : 200135423 0

WARNING in subr. METQA -- Met data begin late
Start of simulation: 200036623 0
Start of met data : 200135423 0